

RETROREFLECTIVE CUBE CORNER SHEETING MOLD AND METHOD FOR MAKING THE SAME

Abstract

5 A method is disclosed for manufacturing a plurality of laminae for use in a mold
suitable for use in forming retroreflective cube corner articles. Each lamina has opposing first
and second major surfaces defining therebetween a first reference plane. Each lamina further
includes a working surface connecting the first and second major surfaces. The working
surface defines a second reference plane substantially parallel to the working surface and
10 perpendicular to the first reference plane and a third reference plane perpendicular to the first
reference plane and the second reference plane. The method includes orienting a plurality of
laminae to have their respective first reference planes parallel to each other and disposed at a
first angle relative to a fixed reference axis. At least two groove sets are formed in the
working surface. Each groove set includes at least two parallel adjacent V-shaped grooves in
15 the working surface of the laminae. The at least two groove sets form first, second and third
groove surfaces that intersect substantially orthogonally to form a plurality of cube corner
elements. Each of the plurality of cube corner elements is preferably located on essentially
one of the plurality of lamina. The plurality of laminae can be oriented at a second angle
relative to the fixed reference axis prior to forming at least one of the groove sets. A mold
20 according to the present invention and a retroreflective article made therefrom are also
disclosed.